

## References:

- Acuña, M. H., and N. F. Ness, Results from the GSFC fluxgate magnetometer on Pioneer 11, in *Jupiter*, edited by T. Gehrels, p. 830, Univ. of Arizona Press, Tucson, 1976a.
- Acuña, M. H., and N. F. Ness, The main magnetic field of Jupiter, *J. Geophys. Res.*, **81**, 2917, 1976b.
- Acuña, M. H., F. M. Neubauer, and N. F. Ness, Standing Alfvén wave current system at Io: Voyager 1 observations, *J. Geophys. Res.*, **86**, 8513, 1981.
- Acuña, M. H., K. W. Behannon, and J. E. P. Connerney, Jupiter's magnetic field and magnetosphere, in *Physics of the Jovian magnetosphere*, edited by A. J. Dessler, p. 1, Cambridge Univ. Press, Cambridge, 1983.
- Aikyo, K., and T. Ondoh, Propagation of nonducted VLF waves in the vicinity of the plasma-pause, *J. Radio Res. Labs.*, **18**, 153, 1971.
- Alexander, J. K., Note on the beaming of Jupiter's decameter-wave radiation and its effect on radio rotation period determination, *Astrophys. J.*, **195**, 227, 1975.
- Alexander, J. K., and M. L. Kaiser, Terrestrial kilometric radiation, 1. Spatial structure studies, *J. Geophys. Res.*, **81**, 5948, 1976.
- Alexander, J. K., and M. L. Kaiser, Terrestrial kilometric radiation, 2. Emission from the cusp and dayside magnetosheath, *J. Geophys. Res.*, **82**, 98, 1977.
- Alexander, J. K., M. L. Kaiser, and P. Rodriguez, Scattering of terrestrial kilometric radiation at very high altitudes, *J. Geophys. Res.*, **84**, 2619, 1979a.
- Alexander, J. K., M. D. Desch, M. L. Kaiser, and J. R. Thieman, Latitudinal beaming of Jupiter's low frequency radio emissions, *J. Geophys. Res.*, **84**, 5167, 1979b.
- Alexander, J. K., T. D. Carr, J. R. Thieman, J. J. Schauble, and A. C. Riddle, Synoptic observations of Jupiter's radio emissions : Average statistical properties observed by Voyager, *J. Geophys. Res.*, **86**, 8529, 1981.
- Alexander, J. K., and M. D. Desch, Voyager observations of Jovian millisecond radio bursts, *J. Geophys. Res.*, **89**, 2689, 1984.
- Alfvén, H., On the theory of comet tails, *Tellus*, **9**, 92, 1957.
- Angerami, J. J., and J. O. Thomas, Studies of planetary atmospheres, 1. The distribution of ions and electrons in the Earth's exosphere, *J. Geophys. Res.*, **69**, 4537, 1964.
- Arthur, M. D., W. Greenberg, and P. F. Zweifel, Vlasov theory of plasma oscillations: Linear approximation, *Phys. Fluids*, **20**, 1296, 1977.
- Ashour-Abdalla, M., and C. F. Kennel, Nonconvective and convective electron cyclotron harmonic instabilities, *J. Geophys. Res.*, **83**, 1531, 1978.
- Ashour-Abdalla, M., and H. Okuda, Generation of ordinary mode electromagnetic radiation near the upper hybrid frequency in the magnetosphere, *J. Geophys. Res.*, **89**, 9125, 1984.
- Atreya, S. K., Aeronomy, in *Uranus and Neptune*, NASA Conference Publication SP-2330, p. 55, 1984.
- Aubier, M. G., and F. Genova, A catalogue of the high frequency limit of the Jovian decameter emission observed by Voyager, *Astron. Astrophys. Suppl. Ser.*, **61**, 341, 1985.

- Aubier, M. G., and F. Genova, The Jovian decameter emission and the Io control, in *The solid bodies of the outer solar system*, p. 149, **ESA-SP 242**, 1986.
- Backus, G., Linearized plasma oscillations in arbitrary electron velocity distributions, *J. Math. Phys.*, **1**, 178, 1960.
- Bagenal, F., and J. D. Sullivan, Direct plasma measurements in the Io torus and inner magnetosphere of Jupiter, *J. Geophys. Res.*, **86**, 8447, 1981.
- Bagenal, F., Alfvén wave propagation in the Io plasma torus, *J. Geophys. Res.*, **88**, 3013, 1983.
- Bagenal, F., Plasma conditions inside Io's orbit: Voyager measurements, *J. Geophys. Res.*, **90**, 311, 1985.
- Bagenal, F., R. L. McNutt Jr., J. W. Belcher, H. S. Bridge, and J. D. Sullivan, Revised ion temperatures for Voyager plasma measurements in the Io plasma torus, *J. Geophys. Res.*, **90**, 1755, 1985.
- Bagenal, F., and Y. Leblanc, Io's Alfvén wave pattern and the Jovian decametric arcs, *Astron. Astrophys.*, **197**, 311, 1988.
- Bahnsen, A., O. Funch, P. A. Jensen, M. Jespersen, P. B. Mogensen, and K. Omø, *Wave experiment on Viking, technical description, performance and calibration*, Rep. DRI 4-85, Danish Space Res. Instit., Lyngby, 1985.
- Bahnsen, A., M. Jespersen, E. Ungstrup, and I. B. Iversen, Auroral hiss and kilometric radiation measured from the Viking satellite, *Geophys. Res. Lett.*, **14**, 471, 1987.
- Baldwin, D. E., I. E. Bernstein, and M. P. H. Weenink, *Kinetic theory of plasma waves in a magnetic field*, edited by A. Simon, and W. B. Thompson, **Vol. 3**, pp. 1-125, Interscience Publ., New York, 1971.
- Barbosa, D. D., D. A. Gurnett, W. S. Kurth, and F. L. Scarf, Structure and properties of Jupiter's magnetoplasma disc, *Geophys. Res. Lett.*, **6**, 785, 1979.
- Barbosa, D. D., and W. S. Kurth, Superthermal electrons and Bernstein waves in Jupiter's inner magnetosphere, *J. Geophys. Res.*, **85**, 6729, 1980.
- Barbosa, D. D., Fermi-Compton scattering due to magnetopause surface fluctuations in Jupiter's magnetospheric cavity, *Astrophys. J.*, **243**, 1076, 1981.
- Barbosa, D. D., Low-level VLF and LF radio emissions observed at Earth and Jupiter, *Rev. Geophys.*, **20**, 316, 1982.
- Barbosa, D. D., Comment on "Periodic amplitude variations in Jovian continuum radiation" by W. S. Kurth et al., *J. Geophys. Res.*, **92**, 11269, 1987.
- Barnett, A., In situ measurements of the plasma bulk velocity near the Io flux tube, *J. Geophys. Res.*, **91**, 3011, 1986.
- Barrow, C. H., Narrow band characteristics of Jovian L-bursts, *Icarus*, **15**, 486, 1971.
- Barrow, C. H., Decametre-wave radiation from Jupiter and solar activity, *Planet. Space Sci.*, **20**, 2051, 1972.
- Barrow, C. H., Jupiter's decametric radio emission and solar activity, *Planet. Space Sci.*, **26**, 1193, 1978.
- Barrow, C. H., Association of corotating magnetic sector structure with Jupiter's decameter-wave radio emission, *J. Geophys. Res.*, **84**, 5366, 1979.

- Barrow, C. H., A catalogue of Jupiter's decametric emission observed by Voyager-1 and Voyager-2 in the range 15–40 MHz, *Astron. Astrophys. Suppl. Ser.*, **46**, 111, 1981.
- Barrow, C. H., A. Lecacheux, and Y. Leblanc, Arc structures in the Jovian decameter emission observed from the Earth and from Voyager, *Astron. Astrophys.*, **106**, 94, 1982.
- Barrow, C. H., The influence of the Sun on Jupiter's radio emission, in *Planetary Radio Emissions, Proceedings of an International Workshop held at Graz, Austria*, edited by H. O. Rucker and S. J. Bauer, p. 148, Austrian Acad. Sci. Press, 1985.
- Barrow, C. H., M. D. Desch, and F. Genova, Solar wind control of Jupiter's decametric radio emission, *Astron. Astrophys.*, **165**, 244, 1986.
- Barrow, C. H., Y. Leblanc, and M. D. Desch, The solar wind control of Jupiter's broad-band kilometric radio emission, *Astron. Astrophys.*, **192**, 354, 1988.
- Bastian, T. S., and J. A. Bookbinder, First dynamic spectra of stellar microwave flares, *Nature*, **326**, 678, 1987.
- Bauer, S. J., The planets, in *Space astronomy and solar system exploration*, p. 49, **ESA-SP 268**, 1987.
- Baumback, M. M., D. A. Gurnett, W. Calvert, and S. D. Shawhan, Satellite interferometric measurements of auroral kilometric radiation, *Geophys. Res. Lett.*, **13**, 1105, 1986.
- Baumback, M. M., and W. Calvert, The minimum bandwidths of auroral kilometric radiation, *Geophys. Res. Lett.*, **14**, 119, 1987.
- Behannon, K. W., M. H. Acuña, L. F. Burlaga, R. P. Lepping, N. F. Ness, and F. M. Neubauer, Magnetic field experiment for Voyagers 1 and 2, *Space Sci. Rev.*, **21**, 235, 1977.
- Behannon, K. W., L. F. Burlaga, and N. F. Ness, The Jovian magnetotail and its current sheet, *J. Geophys. Res.*, **86**, 8385, 1981.
- Bekefi, G., *Radiation Processes in Plasmas*, Wiley, New York, NY, 1966.
- Belcher, J. W., C. K. Goertz, J. D. Sullivan, and M. H. Acuña, Plasma observations of the Alfvén wave generated by Io, *J. Geophys. Res.*, **86**, 8508, 1981.
- Bell, B., and H. Glazer, Sunspots and Geomagnetism, *Smithsonian Contr. Astrophys.*, **2**, 161, 1958.
- Benediktov, E. A., G. G. Getmantsev, Y. A. Sazonov, and A. F. Tarasov, Preliminary results of measurements of the intensity of distributed extraterrestrial radio frequency emission at 725 and 1525 kHz frequencies by the satellite Electron-2, *Cosmic Res.*, **3**, 492, (Translation of *Kosm. Issled.*, **3**, 614), 1965.
- Benson, R. F., and W. Calvert, ISIS-1 observations at the source of auroral kilometric radiation, *Geophys. Res. Lett.*, **6**, 479, 1979.
- Benson, R. F., W. Calvert, and D. M. Klumpar, Simultaneous wave and particle observations in the auroral kilometric source region, *Geophys. Res. Lett.*, **7**, 959, 1980.
- Benson, R. F., Harmonic auroral kilometric radiation of natural origin, *Geophys. Res. Lett.*, **9**, 479, 1982.
- Benson, R. F., Ordinary mode auroral kilometric radiation, with harmonics, observed by ISIS 1, *Radio Sci.*, **19**, 543, 1984.

- Benson, R. F., and S. I. Akasofu, Auroral kilometric radiation / aurora correlation, *Radio Sci.*, **19**, 527, 1984.
- Benson, R. F., Auroral kilometric radiation: Wave modes, harmonics, and source region electron density structures, *J. Geophys. Res.*, **90**, 2753, 1985.
- Bernstein, I. B., S. K. Trehan, and M. P. H. Weenink, Plasma oscillations: II. Kinetic theory of waves in plasmas, *Nucl. Fusion*, **4**, 61, 1964.
- Bigg, E. K., Influence of the satellite Io on Jupiter's decametric emission, *Nature*, **203**, 1008, 1964.
- Block, W. F., M. P. Paul, T. D. Carr, G. R. Lebo, V. M. Robinson, and N. F. Six, Interferometry of Jupiter at 18 MHz with a 52800  $\lambda$  baseline, *Astrophys. Letters*, **5**, 133, 1970.
- Boischot, A., C. Rosolen, M. G. Aubier, G. Daigne, F. Genova, Y. Leblanc, A. Lecacheux, J. de la Noë, and B. M. Pedersen, A new high gain, broadband, steerable array to study Jovian decametric emissions, *Icarus*, **43**, 399, 1980.
- Boischot, A., A. Lecacheux, M. L. Kaiser, M. D. Desch, J. K. Alexander, and J. W. Warwick, Radio Jupiter after Voyager: An overview of the Planetary Radio Astronomy observations, *J. Geophys. Res.*, **86**, 8213, 1981.
- Boischot, A., J. H. Sastri, and P. Zarka, Localization of Io and non-Io sources of Jovian decameter emission, *Astron. Astrophys.*, **175**, 287, 1987.
- Bozayan, F. A., and J. N. Douglas, Directivity and stimulation in Jovian decametric radiation *J. Geophys. Res.*, **81**, 3387, 1976.
- Bopp, B. W., D. S. Evans, J. D. Laing, and T. J. Deeming, Orbital elements of six spectroscopic binary stars, *Mon. Not. R. Astron. Soc.*, **147**, 355, 1970.
- Bridge, H. S., J. W. Belcher, R. J. Butler, A. J. Lazarus, A. M. Mavretic, J. D. Sullivan, G. L. Siscoe, and V. M. Vasyliunas, The plasma experiment on the 1977 Voyager mission, *Space Sci. Rev.*, **21**, 259, 1977.
- Broadfoot, A. L., F. Herbert, J. B. Holberg, D. M. Hunten, S. Kumar, B. R. Sandel, D. E. Shemansky, G. R. Smith, R. V. Yelle, D. F. Strobel, H. W. Moos, T. M. Donahue, S. K. Atreya, J. L. Bertaux, J. E. Blamont, J. C. McConnell, A. J. Dessler, S. Linick, R. Springer, Ultraviolet spectrometer observations of Uranus, *Science*, **233**, 74, 1986.
- Brown, G. W., T. D. Carr, and W. F. Block, *Astrophys. Letters*, **1**, 89, 1968.
- Brown, L. W., Spectral behaviour of Jupiter near 1 MHz, *Astrophys. J.*, **194**, L159, 1974.
- Brown, L. W., Possible radio emission from Uranus at 0.5 MHz, *Astrophys. J.*, **207**, L209, 1976.
- Brunner, H., and P. J. van der Houwen, *The numerical solution of Volterra equations*, North-Holland, Amsterdam, 1986.
- Budden, K. G., The theory of the limiting polarization of radio waves reflected by the ionosphere, *Proc. R. Soc. London*, **215**, 215, 1952.
- Budden, K. G., *Radio Waves in the Ionosphere*, Cambridge Univ. Press, 1961.
- Budden, K. G., *The Propagation of Radio Waves*, Cambridge Univ. Press, 1985.
- Budden, K. G., and D. Jones, Full wave calculations of radio windows and their relevance to the theory of production of planetary nonthermal continuum radiation, in *Comparative Study of Magnetospheric Systems*, p. 563, CNES Cepadues Editions, Toulouse, 1986.

- Budden, K. G., and D. Jones, Conversion of electrostatic upper hybrid emissions to electromagnetic O and X mode waves in the Earth's magnetosphere, *Ann. Geophys.*, **5A**, 21, 1987a.
- Budden, K. G., and D. Jones, The theory of radio windows in planetary magnetospheres, *Proc. Roy. Soc. Lond.*, **A412**, 1, 1987b.
- Budden, K. G., and D. Jones, Theory of wave polarization of radio waves in magnetospheric cavities, *Proc. Roy. Soc. Lond.*, **A412**, 25, 1987c.
- Burkard, O., Die Ionosphärenstation an der Universität Graz, *Mitt. des Naturwiss. Vereins der Steiermark*, p. 22, 1956.
- Burke, B. F., and K. L. Franklin, Radio emission from Jupiter, *Nature*, **175**, 1074, 1955a.
- Burke, B. F., and K. L. Franklin, Observations of a variable radio source associated with the planet Jupiter, *J. Geophys. Res.*, **60**, 213, 1955b.
- Busse, F., Generation of planetary magnetism by convection, *Phys. Earth and Planet Int.*, **12**, 350, 1976.
- Buti, B., and G. S. Lakhina, Coherent generation mechanism for auroral kilometric radiation, *J. Geophys. Res.*, **90**, 2785, 1985.
- Calvert, W., The signature of auroral kilometric radiation on ISIS-1 ionograms, *J. Geophys. Res.*, **86**, 76, 1981a.
- Calvert, W., The auroral plasma cavity, *Geophys. Res. Lett.*, **8**, 919, 1981b.
- Calvert, W., The stimulation of auroral kilometric radiation by Type III solar radio bursts, *Geophys. Res. Lett.*, **8**, 1091, 1981c.
- Calvert, W., A feedback model for the source of the auroral kilometric radiation, *J. Geophys. Res.*, **87**, 8199, 1982.
- Calvert, W., The source location of certain Jovian decametric radio emissions, *J. Geophys. Res.*, **88**, 6165, 1983.
- Calvert, W., Triggered Jovian radio emissions, *Geophys. Res. Lett.*, **12**, 179, 1985a.
- Calvert, W., DE-1 measurements of AKR wave directions, *Geophys. Res. Lett.*, **12**, 381, 1985b.
- Calvert, W., Affirmation of triggered Jovian radio emissions and their attribution to corotating radio lasers, *Geophys. Res. Lett.*, **12**, 625, 1985c.
- Calvert, W., Hollowness of the observed auroral kilometric radiation pattern, *J. Geophys. Res.*, **92**, 1267, 1987a.
- Calvert, W., Auroral precipitation caused by auroral kilometric radiation, *J. Geophys. Res.*, **92**, 8792, 1987b.
- Calvert, W., Y. Leblanc, and G. R. A. Ellis, Natural radio lasing at Jupiter, *Astrophys. J.*, **335**, 976–985, 1988.
- Carbary, J. F., Periodicities in the Jovian magnetosphere: Magnetodisc models after Voyager, *Geophys. Res. Lett.*, **7**, 29, 1980.
- Carr, T. D., A. G. Smith, R. Pepple, and C. H. Barrow, 18-megacycle observations of Jupiter in 1957, *Astrophys. J.*, **127**, 274, 1958.

- Carr, T. D., A. G. Smith, and H. Bollhagen, Evidence for the solar corpuscular origin of the decameter–wavelength radiation from Jupiter, *Phys. Rev. Letters.*, **5**, 418, 1960.
- Carr, T. D., A. G. Smith, H. Bollhagen, N. F. Six, and N. E. Chatterton, Recent decameter–wavelength observations of Jupiter, Saturn and Venus, *Astrophys. J.*, **134**, 105, 1961.
- Carr, T. D., S. Gulkis, A. G. Smith, J. May, G. R. Lebo, D. J. Kennedy, and H. Bollhagen, Results of recent investigations of Jupiter’s decametric radiation, *Radio Sci.*, **69D**, 1530, 1965.
- Carr, T. D., and S. Gulkis, The magnetosphere of Jupiter, *Ann. Rev. Astron. Astrophys.*, **7**, 577, 1969.
- Carr, T. D., A. G. Smith, F. F. Donovan, and H. I. Register, The twelve–year periodicities of the decametric radiation of Jupiter, *Radio Sci.*, **5**, 495, 1970.
- Carr, T. D., and M. D. Desch, Recent decametric and hectometric observations of Jupiter, in *Jupiter*, edited by T. Gehrels, p. 693, Univ. of Arizona Press, Tucson, 1976.
- Carr, T. D., J. J. Schauble, and C. C. Schauble, Pre–encounter distribution of Saturn’s low frequency radio emission, *Nature*, **292**, 745, 1981.
- Carr, T. D., M. D. Desch, and J. K. Alexander, Phenomenology of magnetospheric radio emissions, in *Physics of the Jovian magnetosphere*, edited by A. J. Dessler, p. 226, Cambridge Univ. Press, Cambridge, 1983.
- Carr, T. D., P. P. Gombola, W. B. Greenman, G. R. Lebo, J. Levy, J. A. Phillips, and F. Reyes, unpublished data, 1987.
- Case, K. M., Plasma oscillations, *Ann. Phys.*, **7**, 349, 1959.
- Case, K. M., Plasma oscillations, *Phys. Fluids*, **21**, 249, 1978.
- Chree, C., Some phenomena of sunspots and terrestrial magnetism at Kew Observatory, *Phil. Trans. Roy. Soc. (A)*, **212**, 75, 1912.
- Christiansen, P. J., J. Etcheto, K. Rönnmark, and L. Stenflo, Upper hybrid turbulence as a source of nonthermal continuum radiation, *Geophys. Res. Lett.*, **11**, 139, 1984.
- Cohen, M. H., Radioastronomy polarization measurements, *Proc. IRE*, **46**, 172, 1958.
- Cohen, M. H., Magnetoionic mode coupling at high frequencies, *Astrophys. J.*, **131**, 664, 1960.
- Cole, K. D., and O. A. Pokhotelov, Cyclotron solitons – source of earth’s kilometric radiation, *Plasma Phys.*, **22**, 595, 1980.
- Connerney, J. E. P., The magnetic field of Jupiter: A generalized inverse approach, *J. Geophys. Res.*, **86**, 7679, 1981.
- Connerney, J. E. P., M. H. Acuña, and N. F. Ness, Modelling the Jovian current sheet and inner magnetosphere, *J. Geophys. Res.*, **86**, 8370, 1981.
- Connerney, J. E. P., N. F. Ness, and M. H. Acuña, Zonal harmonic model of Saturn’s magnetic field from Voyager 1 and 2 observations, *Nature*, **298**, 44, 1982.
- Connerney, J. E. P., M. H. Acuña, and N. F. Ness, The magnetic field of Uranus, *J. Geophys. Res.*, **92**, 15329, 1987.
- Cowling, T. G., The magnetic field of sunspots, *Mon. Not. Roy. Astron. Soc.*, **94**, 39, 1934.

- Curtis, S. A., Possible nightside source dominance in nonthermal radio emissions from Uranus, *Nature*, **318**, 47, 1985.
- Curtis, S. A., and N. F. Ness, Magnetostrophic balance in planetary dynamos: Predictions for Neptune's magnetosphere, *J. Geophys. Res.*, **91**, 11003, 1986.
- Curtis, S. A., M. D. Desch, and M. L. Kaiser, The radiation belt origin of Uranus' nightside radio emission, *J. Geophys. Res.*, **92**, 15199, 1987.
- Daigne, G., and Y. Ortega-Molina, On polarization transfer in an inhomogeneous birefringent medium, *Astron. Astrophys.*, **133**, 69, 1984.
- Daigne, G., and Y. Leblanc, Narrow-band Jovian kilometric radiation: occurrence, polarization and rotation period, *J. Geophys. Res.*, **91**, 7961, 1986.
- de Feraudy, H., B. M. Pedersen, A. Bahnsen, and M. Jespersen, Viking observations of auroral kilometric radiation from the plasmasphere to night auroral oval source regions, *Geophys. Res. Lett.*, **14**, 511, 1987.
- de Pater, I., Synchrotron radiation as a probe of the inner magnetosphere of Jupiter, *Adv. Space Res.*, **3**, 31, 1983.
- Desch, M. D., T. D. Carr, and J. Levy, Observations of Jupiter at 26.3 MHz using a large array, *Icarus*, **25**, 12, 1975.
- Desch, M. D., Io-phase motion and Jovian decameter source location, *Nature*, **272**, 339, 1978.
- Desch, M. D., R. S. Flagg, and J. May, Jovian S-burst observations at 32 MHz, *Nature*, **272**, 38, 1978.
- Desch, M. D., Io control of the Jovian radio emission, *Nature*, **287**, 339, 1980.
- Desch, M. D., and M. L. Kaiser, The occurrence rate, polarization character, and intensity of broadband Jovian kilometric radiation, *J. Geophys. Res.*, **85**, 4248, 1980.
- Desch, M. D., and M. L. Kaiser, Voyager measurements of the rotation period of Saturn's magnetic field, *Geophys. Res. Lett.*, **8**, 253, 1981.
- Desch, M. D., Evidence for solar wind control of Saturn radio emission, *J. Geophys. Res.*, **87**, 4549, 1982.
- Desch, M. D., and H. O. Rucker, The relationship between Saturn kilometric radiation and the solar wind, *J. Geophys. Res.*, **88**, 8999, 1983.
- Desch, M. D., and M. L. Kaiser, Predictions for Uranus from a radiometric Bode's law, *Nature*, **310**, 755, 1984.
- Desch, M. D., and C. H. Barrow, Direct evidence for solar wind control of Jupiter's hectometer-wavelength radio emission, *J. Geophys. Res.*, **89**, 6819, 1984.
- Desch, M. D., and M. L. Kaiser, On the proposed triggering of Jovian radio emission, *Geophys. Res. Lett.*, **12**, 621, 1985.
- Desch, M. D., J. E. P. Connerney, and M. L. Kaiser, The rotation period of Uranus, *Nature*, **322**, 42, 1986.
- Desch, M. D., and M. L. Kaiser, Ordinary mode radio emission from Uranus, *J. Geophys. Res.*, **92**, 15211, 1987.

- Dessler, A. J., Coordinate systems, in *Physics of the Jovian magnetosphere*, edited by A. J. Dessler, p. 498, Cambridge Univ. Press, Cambridge, 1983.
- Dessler, A. J., Differential rotation of the magnetic fields of gaseous planets, *Geophys. Res. Lett.*, **12**, 299, 1985.
- Divine N., and H. B. Garrett, Charged particle distributions in Jupiter's magnetosphere, *J. Geophys. Res.*, **88**, 6889, 1983.
- Douglas, J. N., and H. J. Smith, Interplanetary scintillation in Jovian decametric radiation, *Astrophys. J.*, **148**, 885, 1967.
- Douglas, J. N., and F. A. Bozyan, Refutation of Bigg's evidence for new Jovian satellites, *Astrophys. Letters*, **4**, 227, 1970.
- Drell, S. D., H. M. Foley, and M. A. Ruderman, Drag and propulsion in the ionosphere, an Alfvén propulsion engine in space, *J. Geophys. Res.*, **70**, 3131, 1965.
- Drummond, J. E., *Plasma Physics*, McGraw-Hill, New York, 1961.
- Dulk, G. A., *Io-related radio emission from Jupiter*, NCAR cooperative Thesis, Univ. of Colorado and High-Altitude Observ., Boulder, Colorado, 1965.
- Dulk, G. A., Apparent changes in the rotation rate of Jupiter, *Icarus*, **7**, 173, 1967.
- Dulk, G. A., B. Rayhrer, and R. Lawrence, The size of Jupiter's decametric radio source, *Astrophys. J.*, **150**, L117, 1967.
- Dulk, G. A., Characteristics of Jupiter's decametric radio source measured with arc-second resolution, *Astrophys. J.*, **159**, 671, 1970.
- Dulk, G. A., T. S. Bastian, and G. Channugam, Radio emission from AM Herculis: The quiescent component and an outburst, *Astrophys. J.*, **273**, 249, 1983.
- Duncan, R. A., Jupiter's rotation, *Planet. Space Sci.*, **19**, 391, 1971.
- Dunckel, N., B. Ficklin, L. Rorden, and R. A. Helliwell, Low-frequency noise observed in the distant magnetosphere, *J. Geophys. Res.*, **75**, 1854, 1970.
- Dusenbery, P. B., and L. R. Lyons, General concepts on the generation of auroral kilometric radiation, *J. Geophys. Res.*, **87**, 7467, 1982.
- Eastman, T. E., and E. W. Hones, Jr., Characteristics of the magnetospheric boundary layer and magnetopause layer as observed by IMP 6, *J. Geophys. Res.*, **84**, 2019, 1979.
- Ecker, C., and G. Frömling, Collisionless plasma oscillations, their residual presentation and the mechanism of Landau damping, *Z. Naturforschung*, **29a**, 1863, 1974.
- Ellis, G. R. A., Cyclotron radiation from Jupiter, *Austral. J. Phys.*, **13**, 344, 1962.
- Ellis, G. R. A., On external radio emission from the Earth's outer atmosphere, *Austral. J. Phys.*, **17**, 63, 1964.
- Ellis, G. R. A., The decametric radio emissions from Jupiter, *Radio Sci.*, **69D**, 1513, 1965.
- Ellis, G. R. A., *An atlas of selected spectra of the Jupiter S-bursts*, Univ. of Tasmania, Hobart, Tas., Australia, 1979.
- Ellis, G. R. A., The source of the Jupiter S-bursts, *Nature*, **283**, 48, 1980.



- Ellis, G. R. A., Observations of the Jupiter S-bursts between 3.2 and 32 MHz, *Austral. J. Phys.*, **35**, 165, 1982.
- Erdélyi, A., *Operational calculus and generalized functions*, p. 39, Holt, Rinehart, and Winston, New York, 1966.
- Etcheto, J., P. J. Christiansen, M. P. Gough, and J. G. Trotignon, Terrestrial continuum radiation observations with GEOS-1 and ISEE-1, *Geophys. Res. Lett.*, **9**, 1239, 1982.
- Eviatar, A., A. M. Lenchek, and S. F. Singer, Distribution of density in an ion-exosphere of a nonrotating planet, *Phys. Fluids*, **7**, 1775, 1964.
- Farrell, W. M., and D. A. Gurnett, A statistical study of solar Type III bursts and auroral kilometric radiation onsets, *J. Geophys. Res.*, **90**, 9634, 1985.
- Farrell, W. M., W. Calvert, and D. A. Gurnett, AKR signal increases caused by triggering, *Geophys. Res. Lett.*, **13**, 370, 1986.
- Fennell, J. F., D. J. Gorney, and P. F. Mizera, Auroral particle distribution functions and their relationship to inverted-V's and auroral arcs, in *Physics of Auroral Arc Formation*, *Geophys. Monogr. Ser.*, **25**, edited by S. I. Akasofu, and J. R. Kan, p. 91, AGU, Washington, D. C., 1981.
- Fisher, R., and R. Gould, Resonance cones in the field pattern of a radio frequency probe in a warm anisotropic plasma, *Phys. Fluids*, **14**, 857, 1971.
- Flagg, R. S., D. S. Krausche, and G. R. Lebo, High resolution spectral analysis of the Jovian decametric radiation, II. The band-like emission, *Icarus*, **29**, 477, 1976.
- Frankel, M. S., LF noise from the Earth's magnetosphere, *Radio Sci.*, **8**, 991, 1973.
- Freund, H. P., C. S. Wu, and J. D. Gaffey, Jr., Calculation of the spontaneous cyclotron emissivity using the complete relativistic resonance condition, *Phys. Fluids*, **27**, 1396, 1984.
- Fung, S. F., Emission of narrow-band Jovian kilometric radiation, Abstract in *EOS Trans. AGU*, **66**, 342, 1985.
- Fung, S. F., and K. Papadopoulos, The emission of narrow-band Jovian kilometric radiation, *J. Geophys. Res.*, **92**, 8579, 1987.
- Galeev A. A., and V. V. Krasnosel'skikh, Strong Langmuir turbulence in the earth's magnetosphere as a source of kilometer radio emission, *JETP letters*, **24**, 515, 1976.
- Gallagher, D. L., and D. A. Gurnett, Auroral kilometric radiation: Time-averaged source location, *J. Geophys. Res.*, **84**, 6501, 1979.
- Gallagher, D. L., and N. D'Angelo, Correlations between solar wind parameters and auroral kilometric radiation, *Geophys. Res. Lett.*, **8**, 1087, 1981.
- Gallet, R. M., Radio observations of Jupiter, in *Planets and Satellites*, edited by G. P. Kuiper, and B. M. Middlehurst, p. 500, Univ. of Chicago Press, Chicago, Illinois, 1961.
- Galopeau, P., P. Zarka, and D. Le Quéau, Modelling of the spectra of the Saturnian kilometric radiation, to be published, 1987.
- Galopeau, P., P. Zarka, and D. Le Quéau, Theoretical model of Saturn's kilometric radiation spectrum, *J. Geophys. Res.*, **94**, 8739-8755, 1989.
- Gary, D. E., J. L. Linsky, and G. A. Dulk, An unusual microwave flare with 56 second oscillations on the M Dwarf L726-8 A, *Astrophys. J.*, **263**, L79, 1982.

- Genova, F., and A. Boischot, Structure of the source of Jovian decametric radiation and interplanetary scintillation, *Nature*, **293**, 382, 1981.
- Genova, F., and Y. Leblanc, Interplanetary scintillation and Jovian DAM emission, *Astron. Astrophys.*, **98**, 133, 1981.
- Genova, F., M. G. Aubier, and A. Lecacheux, Modulations in Jovian decametric spectra : Propagation effects in terrestrial ionosphere and Jovian environment, *Astron. Astrophys.*, **104**, 229, 1981.
- Genova, F., and M. G. Aubier, Terrestrial ionospheric effects on solar decameter spectra, *Ann. Geophys.*, **1**, 415, 1983.
- Genova, F., Source location of planetary radio-emissions, in *Planetary Radio Emissions, Proceedings of an International Workshop held at Graz, Austria*, edited by H. O. Rucker and S. J. Bauer, p. 79, Austrian Acad. Sci. Press, 1985.
- Genova, F., and M. G. Aubier, Io-dependent sources of the Jovian decameter emission, *Astron. Astrophys.*, **150**, 139, 1985.
- Genova, F., Comparative study of planetary radio emissions, in *Comparative Study of Magnetospheric Systems*, edited by B. M. Pedersen, D. Le Quéau, A. Roux, and A. Saint Marc, p. 477, Cepadues Editions, Toulouse, 1986.
- Genova, F., *Contribution à l'étude des émissions radio aurorales des planètes*, Thèse d'Etat soutenue à l'Université Paris, 1987a.
- Genova, F., Les émissions radio "aurorales" des planètes, *Ann. Phys. Fr.*, **12**, 57, 1987b.
- Genova, F., and M. G. Aubier, High frequency limit and visibility of the non-Io and Io-dependent Jovian decameter radio emission, *Astron. Astrophys.*, **177**, 303, 1987.
- Genova, F., P. Zarka, and C. H. Barrow, Voyager and Nançay observations of the Jovian radio emission at different frequencies : Solar wind effect and source extent, *Astron. Astrophys.*, **182**, 159, 1987.
- Genova, F., and W. Calvert, The source location of Jovian millisecond radio bursts with respect to Jupiter's magnetic tail, *J. Geophys. Res.*, **93**, 979, 1988.
- Genova, F., P. Zarka, and A. Lecacheux, Jupiter decametric radiation, in *Time variable phenomena in the Jovian system*, edited by M. J. S. Belton, Proceedings of a workshop held at Flagstaff, Aug. 1987, Arizona, 1989.
- Ginzburg, V. L., *The Propagation of Electromagnetic Waves in Plasmas*, Pergamon Press, Oxford, 1970.
- Gnavi, G., and F. T. Gratton, Impulsive motion of particles and the polarization response function of a plasma in a magnetic field, *Phys. Rev. A*, **36**, 2315, 1987a.
- Gnavi, G., and F. T. Gratton, Growth rate limits for linear instabilities of a magnetized plasma with arbitrary distribution functions, in *Proc. 14th Europ. Conf. Controlled Fusion and Plasma Phys.*, **11D**, part III, p. 1977, Madrid, Europhysics Series, Bochum, 1987b.
- Goertz, C. K., and P. A. Deift, Io's interaction with the magnetosphere, *Planet. Space Sci.*, **21**, 1399, 1973.
- Goertz, C. K., Io's interaction with the plasma torus, *J. Geophys. Res.*, **85**, 2949, 1980.

- Goertz, C. K. The orientation and motion of the predawn current sheet and Jupiter's magnetotail, *J. Geophys. Res.*, **86**, 8429, 1981.
- Goldman, M. V., Progress and problems in the theory of Type III solar radio emission, *Solar Phys.*, **89**, 403, 1983.
- Goldreich, P., and D. Lynden-Bell, Io, a Jovian unipolar inductor, *Astrophys. J.*, **156**, 59, 1969.
- Goldstein, M. L., and J. R. Thieman, The formation of arcs in the dynamic spectra of Jovian decameter bursts, *J. Geophys. Res.*, **86**, 8569, 1981.
- Goldstein, M. L., and C. K. Goertz, Theories of radio emissions and plasma waves, in *Physics of the Jovian Magnetosphere*, edited by A. J. Dessler, p. 317, Cambridge Univ. Press, Cambridge, 1983.
- Goldstein, M. L., R. R. Sharma, M. Ben-Ari, A. Eviatar, and K. Papadopoulos, A theory of Jovian decameter radiation, *J. Geophys. Res.*, **88**, 792, 1983.
- Gordon, M. A., and J. W. Warwick, High time-resolution studies of Jupiter's radio bursts, *Astrophys. J.*, **148**, 511, 1967.
- Gough, M. P., P. J. Christiansen, G. Martelli, and E. J. Gershuny, Interaction of electrostatic waves with warm electrons at the geomagnetic equator, *Nature*, **279**, 515, 1979.
- Grabbe, C. L., Auroral kilometric radiation: A theoretical review, *Rev. Geophys. Space Phys.*, **19**, 627, 1981.
- Grabbe, C. L., Theory of the fine structure of the auroral kilometric radiation, *Geophys. Res. Lett.*, **9**, 155, 1982.
- Green, J. L., D. A. Gurnett, and S. D. Shawhan, The angular distribution of auroral kilometric radiation, *J. Geophys. Res.*, **82**, 1825, 1977.
- Green, J. L., D. A. Gurnett, and R. A. Hoffmann, A correlation between auroral kilometric radiation and inverted-V electron precipitation, *J. Geophys. Res.*, **84**, 5216, 1979.
- Green, J. L., and D. A. Gurnett, Ray tracing of Jovian kilometric radiation, *Geophys. Res. Lett.*, **7**, 65, 1980.
- Green, J. L., The Io decametric emission cone, *Radio Sci.*, **19**, 556, 1984.
- Green, J. L., and D. L. Gallagher, The detailed intensity distribution of the AKR emission cone, *J. Geophys. Res.*, **90**, 9641, 1985.
- Green, T. C., and W. M. Sherrill, Io-related polarization characteristics of the Jovian decameter emission, *Astrophys. J.*, **158**, 351, 1969.
- Gulkis, S., and T. D. Carr, Radio rotation period of Jupiter, *Science*, **154**, 257, 1966.
- Gulkis, S., and T. D. Carr, The main source of radio emission from the magnetosphere of Uranus, *J. Geophys. Res.*, **92**, 15159, 1987.
- Gurnett, D. A., and R. R. Shaw, Electromagnetic radiation trapped in the magnetosphere above the plasma frequency, *J. Geophys. Res.*, **78**, 8136, 1973.
- Gurnett, D. A., The earth as a radio source: Terrestrial kilometric radiation, *J. Geophys. Res.*, **79**, 4227, 1974.
- Gurnett, D. A., The earth as a radio source: The nonthermal continuum, *J. Geophys. Res.*, **80**, 2751, 1975.

- Gurnett, D. A., and L. A. Frank, Continuum radiation associated with low-energy electrons in the outer radiation zone, *J. Geophys. Res.*, **81**, 3875, 1976.
- Gurnett, D. A., *J. Geomagn. Geoelect.*, **30**, 257, 1978.
- Gurnett, D. A., R. R. Anderson, F. L. Scarf, R. W. Friedrichs, and E. J. Smith, Initial results from the ISEE-1 and ISEE-2 plasma wave investigation, *Space Sci. Rev.*, **23**, 103, 1979a.
- Gurnett, D. A., W. S. Kurth, and F. L. Scarf, Plasma wave observations near Jupiter: Initial results from Voyager 2, *Science*, **206**, 987, 1979b.
- Gurnett, D. A., W. S. Kurth, and F. L. Scarf, The structure of the Jovian magnetotail from plasma wave observations, *Geophys. Res. Lett.*, **7**, 53, 1980.
- Gurnett, D. A., and C. K. Goertz, Multiple Alfvén wave reflections excited by Io: Origin of the Jovian decametric arcs, *J. Geophys. Res.*, **86**, 717, 1981.
- Gurnett, D. A., and R. R. Anderson, The kilometric radio emission spectrum: Relationship to auroral acceleration processes, in *Physics of Auroral Arc Formation*, *Geophys. Monogr. Ser.*, **25**, edited by S. I. Akasofu, and J. R. Kan, p. 341, AGU, Washington, D. C., 1981.
- Gurnett, D. A., W. S. Kurth, and F. L. Scarf, Narrowband electromagnetic emissions from Saturn's magnetosphere, *Nature*, **292**, 733, 1981a.
- Gurnett, D. A., F. L. Scarf, W. S. Kurth, R. R. Shaw, and R. L. Poynter, Determination of Jupiter's electron density profile from plasma wave observations, *J. Geophys. Res.*, **86**, 8199, 1981b.
- Gurnett, D. A., S. D. Shawhan, and R. R. Shaw, Auroral hiss, Z mode radiation, and auroral kilometric radiation in the polar magnetosphere: DE 1 observations, *J. Geophys. Res.*, **88**, 329, 1983a.
- Gurnett, D. A., W. S. Kurth, and F. L. Scarf, Narrowband electromagnetic emissions from Jupiter's magnetosphere, *Nature*, **302**, 385, 1983b.
- Gurnett, D. A., W. S. Kurth, F. L. Scarf, and R. L. Poynter, First plasma wave observations at Uranus, *Science*, **233**, 106, 1986.
- Gurnett, D. A., W. Calvert, R. L. Huff, D. Jones, and M. Sugiura, The polarization of escaping terrestrial continuum radiation, *J. Geophys. Res.*, **93**, 1988.
- Haselgrove, J., Ray theory and a new method for ray tracing, *Report of Conference on the Physics of the Ionosphere*, London Phys. Soc., 355, 1955.
- Hashimoto, K., and M. L. Goldstein, A theory of the Io phase asymmetry of the Jovian decametric radiation, *J. Geophys. Res.*, **88**, 2010, 1983.
- Hashimoto, K., A reconciliation of propagation modes of auroral kilometric radiation, *J. Geophys. Res.*, **89**, 7459, 1984.
- Hashimoto, K., K. Yamaashi, and I. Kimura, Three-dimensional ray tracing of electrostatic cyclotron harmonic waves and Z mode electromagnetic waves in the magnetosphere, *Radio Sci.*, **22**, 579, 1987.
- Hayes, J. N., Damping of plasma oscillations in the linear theory, *Phys. Fluids*, **4**, 1387, 1961.
- Hayes, J. N., On Non-Landau damped solutions to the linearized Vlasov equation, *Nuovo Cimento*, **30**, 1048, 1963.

- Helliwell, R. A., and U. S. Inan, VLF wave growth and discrete emission triggering in the magnetosphere: A feedback model, *J. Geophys. Res.*, **87**, 3537, 1982.
- Herbert, F., "Alfvén wing" models of the induced electrical current system at Io: A probe of the ionosphere of Io, *J. Geophys. Res.*, **90**, 8241, 1985.
- Hess, W. N., *The radiation belt and magnetosphere*, Blaisdell Publishing Company, Waltham, Mass., 1968.
- Hewitt, R. G., D. B. Melrose, and K. G. Rönnmark, A cyclotron theory for the beaming pattern of Jupiter's decametric radio emission, *Proc. Astron. Soc. Australia.*, **4**, 221, 1981.
- Hewitt, R. G., D. B. Melrose, and K. G. Rönnmark, The loss-cone driven electron-cyclotron maser, *Austral. J. Phys.*, **35**, 447, 1982.
- Hide, R., and D. Stannard, Jupiter's magnetism: Observations and theory, in *Jupiter*, edited by T. Gehrels, p. 767, Univ. of Arizona Press, Tucson, 1976.
- Hill, T. W., Inertial limit on corotation, *J. Geophys. Res.*, **84**, 6554, 1979.
- Hill, T. W., Corotation lag in Jupiter's magnetosphere: A comparison of observation and theory, *Science*, **207**, 301, 1980.
- Hill, T. W., A. J. Dessler, and L. J. Maher, Corotating magnetospheric convection, *J. Geophys. Res.*, **86**, 9020, 1981.
- Hill, T. W., C. K. Goertz, and M. F. Thomsen, Some consequences of corotating magnetospheric convection, *J. Geophys. Res.*, **87**, 8311, 1982.
- Hill, T. W., A. J. Dessler, and C. K. Goertz, Magnetospheric models, in *Physics of the Jovian Magnetosphere*, edited by A. J. Dessler, p. 353, Cambridge Univ. Press, 1983.
- Holman, G. D., D. Eichler, and M. R. Kundu, An interpretation of solar flare microwave spikes as gyrosynchrotron masering, in *Radio Physics of the Sun, (IAU Symp. No. 86)*, edited by M. R. Kundu, and T. E. Gergely, p. 457, D. Reidel, MA, USA, 1980.
- Horne, R. B., Raytracing of electrostatic and Z mode radiation in the Earth's magnetosphere, *XXIIInd General Assembly of URSI, Book of Abstracts*, p. 186, Tel Aviv, Israel, 1987.
- Horne, R. B., Ray tracing of electrostatic waves in a hot plasma and its application to the generation of terrestrial myriametric radiation, *Geophys. Res. Lett.*, **15**, 553, 1988.
- Horwitz, J. L., and M. Lockwood, The cleft ion fountain: A two-dimensional kinetic model, *J. Geophys. Res.*, **90**, 9749, 1985.
- Huff, R. L., W. Calvert, J. D. Craven, L. A. Frank, and D. A. Gurnett, Mapping of auroral kilometric radiation sources to the aurora, *J. Geophys. Res.*, **93**, 11445, 1988.
- Hultqvist, B., The Viking project, *Geophys. Res. Lett.*, **14**, 379, 1987.
- Jenkins, G. M., and D. G. Watts, *Spectral analysis and its applications*, Holden-Day, San Francisco, 1968.
- Jones D., and R. J. L. Grard, Electromagnetic wave propagation in the outer magnetosphere and near-Earth magnetotail, *Eldo-Cecles/Esro-Cers Scient. and Tech. Rev.*, **6**, 97, 1974.
- Jones, D., Mode coupling of Cerenkov radiation as a source of noise above the plasma frequency, in *The Scientific Satellite Programme During the International Magnetospheric Study*, edited by K. Knott, and B. Battrik, p. 281, Reidel Publ., Dordrecht, Holland, 1976a.

- Jones, D., Source of terrestrial non-thermal radiation, *Nature*, **260**, 686, 1976b.
- Jones D., and R. J. L. Grard, Propagation characteristics of electromagnetic waves in the magnetosphere, in *The Scientific Satellite Programme During the International Magnetospheric Study*, edited by K. Knott, and B. Battrock, p. 293, D. Reidel publishing company, 1976.
- Jones D., Mode-coupling of Z-mode waves as a source of terrestrial kilometric and Jovian decametric radiations, *Astron. Astrophys.*, **55**, 245, 1977.
- Jones D., Latitudinal beaming of planetary radio emissions, *Nature*, **288**, 225, 1980.
- Jones D., Radio wave emission from the Io torus, *Adv. Space Res.*, **1**, 333, 1981a.
- Jones, D., Beaming of terrestrial myriametric radiation, *Adv. Space Res.*, **1**, 373, 1981b.
- Jones, D., First remote sensing of the plasmopause by terrestrial myriametric radiation, *Nature*, **294**, 728, 1981c.
- Jones, D., Terrestrial myriametric radiation from the Earth's plasmopause, *Planet. Space Sci.*, **30**, 399, 1982a.
- Jones, D., Plasma waves in the Earth's magnetosphere, *Adv. Space Res.*, **2**, 25, 1982b.
- Jones, D., A technique for studying density gradients and motions of plasmaspheric irregularities, *J. Geophys. Res.*, **52**, 158, 1983a.
- Jones, D., Source of Saturnian myriametric radiation, *Nature*, **306**, 453, 1983b.
- Jones, D., Nonthermal continuum – terrestrial myriametric radiation – narrowband electromagnetic emission, in *Results of the ARCAD 3 Project*, CNES, Cepadues Editions, p. 571, Toulouse, France, 1984a.
- Jones, D., IMS advances in understanding terrestrial myriametric radiation, in *Achievements of the IMS*, p. 511, **ESA-SP 217**, 1984b.
- Jones, D., Non thermal continuum radiation at the radio planets, in *Planetary Radio Emissions, Proceedings of an International Workshop held at Graz, Austria*, edited by H. O. Rucker and S. J. Bauer, p. 11, Austrian Acad. Sci. Press, 1985.
- Jones, D., Io plasma torus and the source of Jovian kilometric radiation (bKOM), *Nature*, **324**, 40, 1986a.
- Jones, D., Planetary nonthermal continuum and associated radiations, *Proc. Internat. Symp. on Space Physics*, Academia Sinica, Beijing, China, 10.11, 1986b.
- Jones, D., The magnetopause as a source of nonthermal continuum radiation, *Physica Scripta*, **35**, 887, 1987a.
- Jones, D., Io plasma torus and the source of Jovian narrow-band kilometric radiation, *Nature*, **327**, 492, 1987b.
- Jones, D., and Y. Leblanc, Source of broadband kilometric radiation, *Ann. Geophys.*, **5A**, 29, 1987.
- Jones, D., W. Calvert, D. A. Gurnett, and R. L. Huff, Observed beaming of terrestrial myriametric radiation, *Nature*, **328**, 391, 1987.
- Kaiser, M. L., and J. K. Alexander, The Jovian decametric rotation period, *Astrophys. Lett.*, **12**, 215, 1972.

- Kaiser, M. L., and R. G. Stone, Earth as an intense planetary radio source: Similarities to Jupiter and Saturn, *Science*, **189**, 285, 1975.
- Kaiser, M. L., J. K. Alexander, Terrestrial kilometric radiation 3. Average spectral properties, *J. Geophys. Res.*, **82**, 3273, 1977.
- Kaiser, M. L., J. K. Alexander, A. C. Riddle, J. B. Pearce, and J. W. Warwick, Direct measurements by Voyagers 1 and 2 of the polarization of terrestrial kilometric radiation, *Geophys. Res. Lett.*, **5**, 857, 1978.
- Kaiser, M. L., and M. D. Desch, Narrow-band Jovian kilometric radiation: A new radio component, *Geophys. Res. Lett.*, **7**, 389, 1980.
- Kaiser, M. L., M. D. Desch, J. W. Warwick, and J. B. Pearce, Voyager detection of nonthermal radio emission from Saturn, *Science*, **209**, 1238, 1980.
- Kaiser, M. L., M. D. Desch, and A. Lecacheux, Saturn kilometric radiation: Statistical properties and beam geometry, *Nature*, **292**, 731, 1981.
- Kaiser, M. L., and M. D. Desch, Saturnian kilometric radiation: Source locations, *J. Geophys. Res.*, **87**, 4555, 1982.
- Kaiser, M. L., and M. D. Desch, Radio emissions from the planets Earth, Jupiter, and Saturn, *Rev. Geophys. Space Phys.*, **22**, 373, 1984.
- Kaiser, M. L., M. D. Desch, W. S. Kurth, A. Lecacheux, F. Genova, B. M. Pedersen, and D. R. Evans, Saturn as a radio source, in *Saturn*, edited by T. Gehrels and M. S. Matthews, p. 378, Univ. of Arizona Press, Tucson, 1984.
- Kaiser, M. L., M. D. Desch, and S. A. Curtis, The sources of Uranus' dominant nightside radio emissions, *J. Geophys. Res.*, **92**, 15169, 1987.
- Kennedy, D. J., *Polarization of the decametric radiation from Jupiter*, Ph. D. Thesis, University of Florida, 1969.
- Kennedy, J. R., G. R. Lebo, and R. B. Pomphrey, A correlation study of solar wind velocity modulation effects and the non- $I_o$  related component of the Jovian decametric radiation, *Bull. Am. Astron. Soc.*, **6**, 431, 1974.
- Kennel, C. F., R. F. Chen, S. L. Moses, W. S. Kurth, F. V. Coroniti, F. L. Scarf, and F. F. Chen, Z mode radiation in Jupiter's magnetosphere, *J. Geophys. Res.*, **92**, 9978, 1987.
- Kimura, I., Effects of ions on whistler-mode ray tracing, *Radio Science, (New Series)*, **1**, 269, 1966.
- Kivelson, M. G., P. J. Coleman Jr., L. Froidevaux, and R. L. Rosenberg, A time dependent model of the Jovian current sheet, *J. Geophys. Res.*, **83**, 4823, 1978.
- Kovalenko, V. A., The relation of Jupiter's decameter radio emission to solar and geomagnetic activity, *Sov. Astron.*, **15**, 478, 1971.
- Krausche, D. S., R. S. Flagg, G. R. Lebo, and A. G. Smith, High resolution spectral analyses of the Jovian decametric radiation. I. Burst morphology and drift rates, *Icarus*, **29**, 463, 1976.
- Kuehl, H. H., Interference structure near the resonance cone, *Phys. Fluids*, **16**, 1311, 1973.
- Kundu, M. R., *Solar Radio Astronomy*, Wiley Interscience, New York, NY, 1965.

- Kundu, M. R., Advances in solar radio astronomy, *Rep. Prog. Phys.*, **45**, 1435, 1982.
- Kupo, I., Y. Mekler, and A. Eviatar, Detection of ionized sulfur in the Jovian magnetosphere, *Astrophys. J. Lett.*, **205**, L51, 1976.
- Kurth, W. S., M. M. Baumbach, and D. A. Gurnett, Direction-finding measurements of auroral kilometric radiation, *J. Geophys. Res.*, **80**, 2764, 1975.
- Kurth, W. S., D. D. Barbosa, F. L. Scarf, D. A. Gurnett, and R. L. Poynter, Low frequency radio emissions from Jupiter: Jovian kilometric radiation, *Geophys. Res. Lett.*, **6**, 747, 1979.
- Kurth, W. S., D. D. Barbosa, D. A. Gurnett, and F. L. Scarf, Electrostatic waves in the Jovian magnetosphere, *Geophys. Res. Lett.*, **7**, 57, 1980a.
- Kurth, W. S., D. A. Gurnett, and F. L. Scarf, Spatial and temporal studies of Jovian kilometric radiation, *Geophys. Res. Lett.*, **7**, 61, 1980b.
- Kurth, W. S., Detailed observations of the source of terrestrial narrowband electromagnetic radiation, *Geophys. Res. Lett.*, **9**, 1341, 1982.
- Kurth, W. S., F. L. Scarf, J. D. Sullivan, and D. A. Gurnett, Detection of nonthermal continuum radiation in Saturn's magnetosphere, *Geophys. Res. Lett.*, **9**, 889, 1982.
- Kurth, W. S., Plasma waves and continuum radiation in planetary magnetospheres, in *Comparative Study of Magnetospheric Systems*, CNES, Cepadues Editions, p. 497, Toulouse, France, 1986.
- Kurth, W. S., D. A. Gurnett, and F. L. Scarf, Sporadic narrowband radio emissions from Uranus, *J. Geophys. Res.*, **91**, 11959, 1986a.
- Kurth, W. S., D. A. Gurnett, and F. L. Scarf, Periodic amplitude variations in Jovian continuum radiation, *J. Geophys. Res.*, **91**, 13523, 1986b.
- Kurth, W. S., D. A. Gurnett, and F. L. Scarf, Reply (to Barbosa, 1987), *J. Geophys. Res.*, **92**, 11273, 1987.
- Landau, L. D., On the vibrations of the electronic plasma, *J. Phys. (USSR)*, **10**, 25, 1946.
- Lang, G. J., and R. G. Peltzer, Planetary radio astronomy receiver, *IEEE Trans. Aerosp. Electron. Syst.*, **AES 13**, 466, 1977.
- Lang, K. A., and R. F. Willson, Millisecond radio spikes from the dwarf M flare star AD Leonis, *Astrophys. J.*, **305**, 363, 1986.
- Lazarus, A. J., and H. R. L. McNutt, Jr., Low energy plasma ion observations in Saturn's magnetosphere, *J. Geophys. Res.*, **88**, 8831, 1983.
- Leblanc, Y., M. G. Aubier, C. Rosolen, F. Genova, and J. de la Noë, The Jovian S-bursts. II. Frequency drift measurements at different frequencies throughout several storms, *Astron. Astrophys.*, **86**, 349, 1980a.
- Leblanc, Y., F. Genova, and J. de la Noë, The Jovian S bursts. I. Occurrence with L bursts and frequency limit, *Astron. Astrophys.*, **86**, 342, 1980b.
- Leblanc, Y., On the arc structure of the DAM Jupiter emission, *J. Geophys. Res.*, **86**, 8546, 1981.
- Leblanc, Y., and F. Genova, The Jovian S burst sources, *J. Geophys. Res.*, **86**, 8564, 1981.



- Leblanc, Y., J. de la Noë, F. Genova, A. Gerbault, and A. Lecacheux, A catalogue of Jovian decametric radio emission from January 1978 to December 1979, *Astron. Astrophys. Suppl. Ser.*, **46**, 135, 1981.
- Leblanc, Y., and M. Rubio, A narrow-band splitting of the Jovian decametric cutoff frequency, *Astron. Astrophys.*, **111**, 284, 1982.
- Leblanc, Y., A. Gerbault, M. Rubio, and F. Genova, A catalogue of the Jovian decametric radio observations from January 1980 to December 1981, *Astron. Astrophys. Suppl. Ser.*, **54**, 135, 1983.
- Leblanc, Y., and G. Daigne, Broadband Jovian kilometric radiation: New results on polarization and beaming, *J. Geophys. Res.*, **90**, 12073, 1985a.
- Leblanc, Y., and G. Daigne, The broadband Jovian kilometric radiation, statistical properties and source model, in *Planetary Radio Emissions, Proceedings of an International Workshop held at Graz, Austria*, edited by H. O. Rucker and S. J. Bauer, p. 112, Austrian Acad. Sci. Press, 1985b.
- Leblanc, Y., D. Jones, and H. O. Rucker, Jovian 1.2-kHz nonthermal continuum radiation, *J. Geophys. Res.*, **91**, 9995, 1986.
- Leblanc, Y., M. G. Aubier, A. Ortega-Molina, and A. Lecacheux, Overview of the Uranian radio emissions: Polarization and constraints on source locations, *J. Geophys. Res.*, **92**, 15125, 1987.
- Leblanc, Y., A. Gerbault, and A. Lecacheux, A catalogue of Jovian decametric radio observations from January 1983 to December 1984, *Astron. Astrophys. Suppl. Ser.*, **77**, 425-438, 1989.
- Leblanc, Y., and G. Daigne, *J. Geophys. Res.*, in press, 1988.
- Lecacheux, A., Periodic variations of the position of Jovian decameter sources in longitude (System III) and phase of Io, *Astron. Astrophys.*, **37**, 301, 1974.
- Lecacheux, A., Spectral study of the polarization of the Jovian decametric radio bursts, *Astron. Astrophys.*, **49**, 197, 1976.
- Lecacheux, A., B. M. Pedersen, A. C. Riddle, J. B. Pearce, A. Boischot, and J. W. Warwick, Some spectral characteristics of the hectometric Jovian emission, *J. Geophys. Res.*, **85**, 6877, 1980.
- Lecacheux, A., Ray tracing in the Io plasma torus: Application to the PRA observations during Voyager 1's closest approach, *J. Geophys. Res.*, **86**, 8523, 1981.
- Lecacheux, A., N. Meyer-Vernet, and G. Daigne, Jupiter's decametric radio emission: A nice problem of optics, *Astron. Astrophys.*, **94**, L9, 1981.
- Lecacheux A., and F. Genova, Source location of Saturn kilometric radio emission, *J. Geophys. Res.*, **88**, 8993, 1983.
- Lecacheux, A., and A. Ortega-Molina, Polarization and localization of the Uranian radio sources, *J. Geophys. Res.*, **92**, 15148, 1987.
- Lecacheux, A., and S. Hoang, ISEE-3 polarization measurements of the terrestrial kilometric radiation, not published, 1988.
- Lee, L. C., and C. S. Wu, Amplification of radiation near cyclotron frequency due to electron population inversion, *Phys. Fluids*, **23**, 1348, 1980.

- Lee, L. C., J. R. Kan, and C. S. Wu, Generation of auroral kilometric radiation and the structure of auroral acceleration region, *Planet. Space Sci.*, **28**, 703, 1980.
- Lembege, B., and D. Jones, Propagation of electrostatic upper hybrid emission and Z mode waves at the geomagnetic equatorial plasmopause, *J. Geophys. Res.*, **87**, 6187, 1982.
- Le Quéau, D., R. Pellat, and A. Roux, Direct generation of the auroral kilometric radiation by the maser synchrotron instability: An analytical approach, *Phys. Fluids*, **27**, 247, 1984a.
- Le Quéau, D., R. Pellat, and A. Roux, Direct generation of the auroral kilometric radiation by the maser synchrotron instability: Physical discussion of the mechanism and parametric study, *J. Geophys. Res.*, **89**, 2831, 1984b.
- Le Quéau, D., R. Pellat, and A. Roux, The maser synchrotron instability in an inhomogeneous medium: Application to the generation of the auroral kilometric radiation, *Ann. Geophys.*, **3**, 273, 1985.
- Le Quéau, D., and A. Roux, Quasi monochromatic wave particle interactions in magnetospheric plasmas, *Solar Phys.*, **111**, 59, 1987.
- Le Quéau, D., and P. Louarn, Analytical study of the relativistic dispersion: application to the generation of the AKR, *J. Geophys. Res.*, **94**, 2605, 1989.
- Levitskii, L. S., and B. M. Vladimirkii, Influence of sector structure of interplanetary magnetic field on Jupiter's decameter radio emission, *Izv. Krymsk. Astrofiz. Obs.*, **59**, 104, 1979.
- Lin, C. S., J. L. Burch, C. Gurgiolo, and C. S. Wu, DE-1 observations of hole electron distribution functions and the cyclotron maser resonance, *Ann. Geophys.*, **4**, 33, 1986.
- Louarn, P., D. Le Quéau, and A. Roux, Direct generation of solar and stellar radio bursts by energetic electron maser, *Solar Phys.*, **111**, 201, 1987.
- Lundin, R., L. Eliasson, B. Hultqvist, and K. Stasiewicz, Plasma energization on auroral field-lines observed by the Viking spacecraft, *Geophys. Res. Lett.*, **14**, 443, 1987.
- Luzemann, M., *Elektrodynamische Wechselwirkung des Mondes Io mit der Jupitermagnetosphäre*, Ph. D., University of Braunschweig, Federal Republic of Germany, 1980.
- Lynch, M. A., T. D. Carr, J. May, W. F. Block, V. M. Robinson, and N. F. Six, Long-baseline analysis of a Jovian decametric L burst, *Astrophys. Letters*, **10**, 153, 1972.
- Lynch, M. A., T. D. Carr, and J. May, VLBI measurements of Jovian S bursts, *Ap. J.*, **207**, 325, 1976.
- Maeda, K., and T. D. Carr, Beam structure of Jupiter's decametric radiation, *Nature*, **308**, 166, 1984.
- May, J., and T. D. Carr, *Quart. J. Fla. Acad. Sci.*, **30**, 1, 1967.
- May, J., T. D. Carr, and M. D. Desch, Decametric radio measurements of Jupiter's rotation period, *Icarus*, **40**, 87, 1979.
- McLaughlin, W. I., Prediscovery evidence of planetary rings, *J. B. I. S.*, **33**, 287, 1980.
- Mellot, M. M., W. Calvert, R. L. Huff, D. A. Gurnett, and S. D. Shawhan, DE-1 observations of ordinary mode and extraordinary mode auroral kilometric radiation, *Geophys. Res. Lett.*, **11**, 1188, 1984.
- Mellot, M. M., R. L. Huff, and D. A. Gurnett, The auroral kilometric radiation: DE 1 direction finding studies, *Geophys. Res. Lett.*, **12**, 479, 1985.

- Mellot, M. M., R. L. Huff, and D. A. Gurnett, DE-1 observations of harmonic auroral kilometric radiation, *J. Geophys. Res.*, **91**, 13732, 1986.
- Melrose, D. B., An interpretation of Jupiter's decametric radiation and the terrestrial kilometric radiation as direct amplified gyroemission, *Astrophys. J.*, **207**, 651, 1976.
- Melrose, D. B., *Plasma Astrophysics*, Vol. 1, Gordon and Breach, New York, NY, 1980.
- Melrose, D. B., A theory for the nonthermal radio continua in the terrestrial and Jovian magnetospheres, *J. Geophys. Res.*, **86**, 30, 1981.
- Melrose, D. B., K. G. Rönnmark, and R. G. Hewitt, Terrestrial kilometric radiation: The cyclotron theory, *J. Geophys. Res.*, **87**, 5140, 1982.
- Melrose, D. B., A phase-bunching mechanism for fine structure in auroral kilometric radiation and Jovian decameter radiation, *J. Geophys. Res.*, **91**, 7970, 1986a.
- Melrose, D. B., *Instabilities in Space and Laboratory Plasmas*, p. 170, Cambridge Univ. Press, Cambridge, 1986b.
- Mendenhall, W., *Introduction to Probability and Statistics*, Duxbury Press, Belmont, CA, 1971.
- Menietti, J. D., J. L. Green, S. Gulkis, and F. Six, Three-dimensional ray tracing of the Jovian magnetosphere in the low-frequency range, *J. Geophys. Res.*, **89**, 1489, 1984a.
- Menietti, J. D., J. L. Green, S. Gulkis, and N. F. Six, Jovian decametric arcs: An estimate of the required wave normal angles from three-dimensional ray tracing, *J. Geophys. Res.*, **89**, 9089, 1984b.
- Mercier, C., Effects of atmospheric gravity waves on radio astronomical observations, *Ann. Geophys.*, **4**, 469, 1986.
- Meyer-Vernet, N., On day-time ionospheric effect on some radio intensity measurements and interferometry, *Astron. Astrophys.*, **84**, 142, 1980.
- Meyer-Vernet, N., G. Daigne, and A. Lecacheux, Dynamic spectra of some terrestrial ionospheric effects at decametric wavelengths. Application in other astrophysical contexts, *Astron. Astrophys.*, **96**, 296, 1981.
- Mizera, P. F., and J. F. Fennel, Signature of electric fields from high and low altitude particle distribution, *Geophys. Res. Lett.*, **4**, 311, 1977.
- Montgomery, D. C., *Theory of unmagnetized plasma*, Gordon and Breach, New York, 1971.
- Morioka, A., H. Oya, and S. Miyatake, Terrestrial kilometric radiation observed by the satellite Jikiken (EXOS-B), *J. Geomagn. Geoelectr.*, **33**, 37, 1981.
- Moses, S. L., W. S. Kurth, C. F. Kennel, F. V. Coroniti, and F. L. Scarf, Polarization of low-frequency electromagnetic radiation in the lobes of Jupiter's magnetotail, *J. Geophys. Res.*, **92**, 4701, 1987.
- Mostetschnig, V., and H. O. Rucker, Artificial baseline extension for the reception of Jovian decametric radiation, *Kleinheub. Ber.*, **28**, 507, 1985.
- Nardi, V., F. T. Gratton, and G. Gnani, Exact solutions for perturbations of Vlasov-Poisson structures, *Phys. Letters*, **A 121**, 427, 1987a.
- Nardi, V., F. T. Gratton, and G. Gnani, A Hamilton method to derive three dimensional oscillatory Vlasov structures with a magnetic field, in *Proc. 14th Europ. Conf. Controlled*

- Fusion and Plasma Phys.*, **11D**, part III, p. 1127, Madrid, Europhysics Series, Bochum, 1987b.
- Neubauer, F. M., Nonlinear standing Alfvén wave current system at Io: Theory, *J. Geophys. Res.*, **85**, 1171, 1980.
- Neubauer, F. M., D. A. Gurnett, J. D. Scudder, and R. E. Hartle, Titan's magnetospheric interaction, in *Saturn*, edited by T. Gehrels and M. S. Matthews, p. 760, Univ. of Arizona Press, 1984.
- Neubauer, F. M., K. H. Glassmeier, M. Pohl, J. Raeder, M. H. Acuña, L. F. Burlaga, N. F. Ness, G. Musmann, F. Mariani, M. K. Wallis, E. Ungstrup, and H. U. Schmidt, First results from the Giotto magnetometer experiment at comet Halley, *Nature*, **321**, 352, 1986.
- Ness, N. F., M. H. Acuña, R. P. Lepping, L. F. Burlaga, K. W. Behannon, and F. M. Neubauer, Magnetic field studies at Jupiter by Voyager 1: Preliminary results, *Science*, **204**, 982, 1979.
- Ness, N. F., M. H. Acuña, R. P. Lepping, J. E. P. Connerney, K. W. Behannon, L. F. Burlaga, and F. M. Neubauer, Magnetic field studies by Voyager 1: Preliminary results at Saturn, *Science*, **212**, 211, 1981.
- Ness, N. F., M. H. Acuña, K. W. Behannon, L. F. Burlaga, J. E. P. Connerney, R. P. Lepping, and F. M. Neubauer, Magnetic fields at Uranus, *Science*, **233**, 85, 1986.
- Ohnuma, T., Radiation phenomenon of plasma waves, parts 1 and 2, *IEEE Trans. Plasma Sci.*, **6**, 464, 1978.
- Okuda, H., M. Ashour-Abdalla, M. S. Chance, and W. S. Kurth, Generation of nonthermal continuum in the magnetosphere, *J. Geophys. Res.*, **87**, 10457, 1982.
- Omidi, N., and D. A. Gurnett, Growth rate calculations of auroral kilometric radiation using the relativistic resonance condition, *J. Geophys. Res.*, **87**, 2377, 1982.
- Omidi, N., and D. A. Gurnett, Path-integrated growth of auroral kilometric radiation, *J. Geophys. Res.*, **89**, 10801, 1984.
- Omidi, N., C. S. Wu, and D. A. Gurnett, Generation of auroral kilometric and Z mode radiation by the cyclotron maser mechanism, *J. Geophys. Res.*, **89**, 883, 1984.
- Omidi, N., and C. S. Wu, The effect of background plasma density on the growth of ordinary and Z mode emissions in the auroral zone, *J. Geophys. Res.*, **90**, 6641, 1985.
- Ortega-Molina, A., *Polarisation et transfert des émissions décimétriques de Jupiter observées par l'expérience PRA/Voyager*, Thèse de 3ième cycle, Paris VI, 1983.
- Ortega-Molina, A., and G. Daigne, Polarization response of two crossed monopoles on a spacecraft, *Astron. Astrophys.*, **130**, 301, 1984.
- Oya, H., Conversion of electrostatic waves into electromagnetic waves: Numerical calculation of the dispersion relation for all wavelengths, *Radio Sci.*, **6**, 1131, 1971.
- Oya, M., Origin of Jovian decameter wave emissions – conversion from the electron cyclotron plasma wave to the ordinary mode electromagnetic wave, *Planet. Space Sci.*, **22**, 687, 1974.
- Oya, H., and A. Morioka, Effect of turbulent region of interplanetary magnetic field on Jovian decametric radio emissions from the main source, *Trans. Am. Geophys. Un.*, **58**, 757, 1977.

- Oya, H., and A. Morioka, Observational evidence of Z and L–O mode waves as the origin of the auroral kilometric radiation from the Jikiken (EXOS–B) satellite, *J. Geophys. Res.*, **88**, 6189, 1983.
- Oya, H., and A. Morioka, *Jovian decametric radiations observed at the Zao station*, Part–2, 1985.
- Oya, H., and A. Morioka, *Jovian decametric radiations observed at the Zao station*, Part–3, 1987.
- Parker, G. D., G. A. Dulk, and J. W. Warwick, Faraday effect on Jupiter’s radio bursts, *Astrophys. J.*, **157**, 439, 1969.
- Pearce, J. B., A heuristic model for Jovian decametric arcs, *J. Geophys. Res.*, **86**, 8579, 1981.
- Pécseli, H. L., Propagation of ion acoustic perturbations, *Physica Scripta*, **11**, 311, 1975.
- Pécseli, H. L., Solitons and weakly nonlinear waves in plasmas, *IEEE Trans. Plasma Science*, **13**, No.2, 53, 1985.
- Phillips, J. A., *Low Frequency Interferometry of Jovian Radio Bursts*, Master of Science Thesis, Univ. of Florida, Gainesville, 1986.
- Piddington, J. H., and J. F. Drake, Electrodynamic effects of Jupiter’s satellite Io, *Nature*, **217**, 935, 1968.
- Piddington, J. H., *Cosmic electrodynamics*, John Wiley & Sons, New York, 1969.
- Pilcher, C. B., and J. S. Morgan, The distribution of [SII] emission around Jupiter, *Astrophys. J.*, **238**, 375, 1980.
- Pilcher, C. B., and J. S. Morgan, Magnetic longitude variations in the Io torus, *Adv. Space Res.*, **5**, part 4, 1, 1985.
- Pilcher, C. B., J. H. Fertel, and J. S. Morgan, [SII] images of the Io torus, *Astrophys. J.*, **291**, 377, 1985.
- Poeeverlein, H., Strahlwege von Radiowellen in der Ionosphäre I, *S.B. bayer. Akad. Wiss.*, 175, 1949a.
- Poeeverlein, H., Strahlwege von Radiowellen in der Ionosphäre II, *Z. Angew. Phys.*, **1**, 517, 1949b.
- Poeeverlein, H., Strahlwege von Radiowellen in der Ionosphäre III, *Z. Angew. Phys.*, **2**, 152, 1950.
- Pokorny, Z., Decametric emission of Jupiter and solar activity, *Bull. Astron. Inst. Czech.*, **33**, 193, 1982.
- Poquérusse, M., and A. Lecacheux, First direct measurement of the beaming of Jupiter’s decametric radiation, *Nature*, **275**, 111, 1978.
- Pottelette, R., M. Malingre, A. Bahnsen, and M. Jespersen, Observations of intense electrostatic hiss bands in the source regions of auroral kilometric radiation, *Geophys. Res. Lett.*, **14**, 515, 1987.
- Pritchett, P. L., Relativistic dispersion, the cyclotron maser instability, and auroral kilometric radiation, *J. Geophys. Res.*, **89**, 8957, 1984.

- Pritchett, P. L., Electron cyclotron maser instability in relativistic plasmas, *Phys. Fluids*, **29**, 2919, 1986.
- Radler, K. H., and N. F. Ness, Comments on the symmetry properties of planetary magnetic fields, submitted to *J. Geophys. Res.*, 1988.
- Ratcliffe, J.A. ., *The magnetoionic theory and its applications to the ionosphere*, Cambridge University Press, Cambridge, 1962.
- Register, H. I., and A. G. Smith, A two-component model of changes in Jupiter's radio frequency rotation period, *Astrophys. Lett.*, **3**, 209, 1969.
- Riddle, A. C., and J. W. Warwick, Redefinition of System III longitude, *Icarus*, **27**, 457, 1976.
- Riddle, A. C., Identification of radio emission from the Io flux tube, *J. Geophys. Res.*, **88**, 455, 1983.
- Riihimaa, J. J., Modulation lanes in the dynamic spectra of Jovian L-bursts, *Astron. Astrophys.*, **4**, 180, 1970.
- Riihimaa, J. J., Modulation lanes in the dynamic spectra of Jupiter's decametric radio emission, *Ann. Acad. Sci. Fenn.*, **A VI**, 1, 1974.
- Riihimaa, J. J., Polarization patterns in the dynamic spectra of Jupiter's decametric radio bursts, *Astron. Astrophys.*, **53**, 121, 1976.
- Riihimaa, J. J., S-bursts in Jupiter's decametric radio spectra, *Astrophys. Space Sci.*, **51**, 363, 1977.
- Riihimaa, J. J., L-bursts in Jupiter's decametric radio spectra, *Astrophys. Space Sci.*, **56**, 503, 1978.
- Riihimaa, J. J., Modulation lanes in the dynamic spectra of Jupiter's decametric radio bursts, *Astron. Astrophys.*, **78**, L21, 1979.
- Riihimaa, J. J., Bursts of type N in Jupiter's decametric radio spectra, *Earth, Moon, Planets*, **32**, 9, 1985.
- Riihimaa, J. J., Beaming of Jupiter's decametric emission, *Earth, Moon, Planets*, **34**, 133, 1986.
- Roberts, J. A., G. L. Berge, and R. C. Bignell, High-resolution maps of the 1.5 GHz emission from Jupiter's disk and radiation belt, *Astrophys. J.*, **282**, 345, 1984.
- Rönnmark, K., Emission of myriametric radiation by coalescence of upper hybrid waves with low frequency waves, *Ann. Geophys.*, **1**, 187, 1983.
- Rönnmark, K., Generation of magnetospheric radiation by decay of Bernstein waves, *Geophys. Res. Lett.*, **10**, 639, 1985.
- Roesler, F. L., F. Scherb, and R. J. Oliverson, Periodic intensity variation in [SIII] 9531 Å emission from the Jupiter plasma torus, *Geophys. Res. Lett.*, **11**, 128, 1984.
- Roux, A., and R. Pellat, Coherent generation of the auroral kilometric radiation by nonlinear beatings between electrostatic waves, *J. Geophys. Res.*, **84**, 5189, 1979.
- Rucker, H. O., and S. J. Bauer, (editors), *Planetary Radio Emissions, Proceedings of an International Workshop held at Graz, Austria*, Austrian Acad. Sci. Press, 1985.
- Russel, C. T., R. C. Elphic, and J. A. Slavin, Initial Pioneer Venus magnetic field results: Dayside observations, *Science*, **203**, 745, 1979a.

- Russel, C. T., R. C. Elphic, and J. A. Slavin, Initial Pioneer Venus magnetic field results: Nightside observations, *Science*, **205**, 114, 1979b.
- Saflekos, N. A., R. E. Sheehan, and R. L. Carovillano, Global nature of field-aligned currents and their relation to auroral phenomena, *Rev. Geophys. Space Phys.*, **20**, 709, 1982.
- Sandel, B. R., D. E. Shemansky, A. L. Broadfoot, J. B. Holberg, G. R. Smith, J. C. McConnell, D. F. Strobel, S. K. Atreya, T. M. Donahue, H. W. Moos, D. M. Hunten, R. B. Pomphrey, and S. Linick, Extreme ultraviolet observations from the Voyager 2 encounter with Saturn, *Science*, **215**, 548, 1982.
- Sandel, B. R., Corotation lag in the Io plasma torus. Evidence from Voyager EUV observations, *B.A.A.S.*, **15**, 810, 1983.
- Sandel, B. R., and A. J. Dessler, Dual periodicity of the Jovian magnetosphere, *J. Geophys. Res.*, **93**, 5487, 1988.
- Sastry, C. V., Decameter radio emission from Jupiter and solar activity, *Planet. Space Sci.*, **16**, 1147, 1968.
- Scarf, F. L., and D. A. Gurnett, A plasma wave investigation for the Voyager mission, *Space Sci. Rev.*, **21**, 289, 1977.
- Scarf, F. L., D. A. Gurnett, and W. S. Kurth, Jupiter plasma wave observations: An initial Voyager 1 overview, *Science*, **204**, 991, 1979.
- Schardt, A. W., F. B. McDonald, and J. H. Trainor, Energetic particles in the predawn magnetotail of Jupiter, *J. Geophys. Res.*, **86**, 8413, 1981.
- Sharma, R. R., L. Vlahos, and K. Papadopoulos, The importance of plasma effects on electron-cyclotron maser-emission from flaring loops, *Astron. Astrophys.*, **112**, 377, 1982.
- Shawhan, S. D., and D. A. Gurnett, Polarization measurements of auroral kilometric radiation by Dynamics Explorer 1, *Geophys. Res. Lett.*, **9**, 913, 1982.
- Schneider, J., Stimulated emission of radiation by relativistic electrons in a magnetic field, *Phys. Rev. Lett.*, **2**, 504, 1959.
- Sentman, D. D., and C. K. Goertz, Whistler mode noise in Jupiter's inner magnetosphere, *J. Geophys. Res.*, **83**, 3151, 1978.
- Siscoe, G. L., and D. Summers, Centrifugally-driven diffusion of Iogenic plasma, *J. Geophys. Res.*, **86**, 8471, 1981.
- Sittler, E. C., K. W. Ogilvie, and J. D. Scudder, Survey of low-energy plasma electrons in Saturn's magnetosphere: Voyagers 1 and 2, *J. Geophys. Res.*, **88**, 8847, 1983.
- Slee, O. B., and C. S. Higgins, The apparent sizes of the Jovian decametric radio sources, *Austral. J. Phys.*, **19**, 167, 1966.
- Slee, O. B., and C. S. Higgins, The solar wind and Jovian decameter radio emission, *Austral. J. Phys.*, **21**, 341, 1968.
- Smith, A. G. and T. D. Carr, *Radio Exploration of the Planetary System*, Van Nostrand, Princeton, New Jersey, 1964.
- Smith, B. A., L. A. Soderblom, R. Beebe, D. Bliss, J. M. Boyce, A. Brahic, G. A. Briggs, R. H. Brown, S. A. Collins, A. F. Cook II, S. K. Croft, J. N. Cuzzi, G. E. Danielson, M. E.

- Davies, T. E. Dowling, D. Godfrey, C. J. Hansen, C. Harris, G. E. Hunt, A. P. Ingersoll, T. V. Johnson, R. J. Krauss, H. Masursky, D. Morrison, T. Owen, J. B. Plescia, J. B. Pollack, C. C. Porco, K. Rages, C. Sagan, E. M. Shoemaker, L. A. Sromovsky, C. Stoker, R. G. Strom, V. E. Suomi, S. P. Synnott, R. J. Terrile, P. Thomas, W. R. Thompson, and J. Veverka, Voyager 2 in the Uranian system: Imaging science results, *Science*, **233**, 43, 1986.
- Smith, E. J., L. Davis, Jr., and D. E. Jones, Jupiter's magnetic field and magnetosphere, in *Jupiter*, edited by T. Gehrels, p. 788, Univ. of Arizona Press, Tucson, 1976.
- Smith, E. J., B. T. Tsurutani, J. A. Slavin, D. E. Jones, G. L. Siscoe, and D. A. Mendis, International Cometary Explorer encounter with Giacobini-Zinner: Magnetic field observations, *Science*, **232**, 382, 1986.
- Smoluchowski, R., Jupiter's molecular hydrogen layer and the magnetic field, *Astrophys. J.*, **200**, L119, 1975.
- Smoluchowski, R., and M. Torbett, Can magnetic fields be generated in the icy mantles of Uranus and Neptune, *Icarus*, **48**, 146, 1981.
- Staelin, D. H., Character of the Jovian decametric arcs, *J. Geophys. Res.*, **86**, 8581, 1981.
- Staelin, D. H., and P. W. Rosenkranz, Formation of Jovian decametric S-bursts by modulated electron streams, *J. Geophys. Res.*, **87**, 10401, 1982.
- Staelin, D. H., P. M. Garnavich, and Y. Leblanc, Jovian decametric arcs and Alfvén currents, *J. Geophys. Res.*, **93**, 3942, 1988.
- St. Cyr, O. C., *Jupiter's decameter and kilometer emissions: Satellite effects and long term periodicities*, Ph. D. Thesis, Univ. of Florida, 1985.
- Stevenson, D. J., and E. E. Salpeter, Interior models of Jupiter, in *Jupiter*, edited by T. Gehrels, p. 85, Univ. of Arizona Press, 1976.
- Stevenson, D. J., Reducing the non-axisymmetry of a planetary dynamo and an application to Saturn, *Geophys. Astrophys. Fluid Dynamics*, **21**, 113, 1982.
- Stix, T. H., *The Theory of Plasma Waves*, McGraw-Hill, New York, 1962.
- Stone, R. G., J. Caldwell, Y. de Conchy, C. Deschanciaux, R. Ebbett, G. Epstein, K. Goertz, C. C. Harvey, S. Hoang, R. Howard, R. Hulin, G. Huntzinger, P. Kellog, B. Klein, R. Knoll, D. Lokerson, R. Manning, J. P. Mengue, A. Meyer, N. Monge, S. Monson, G. Nicol, V. Phan, J. L. Steinberg, P. Tilloles, E. Torres, and F. Wouters, The ISPM Unified Radio and Plasma Wave Experiment, *ESA Spec. Publ.*, p. 187, **SP-1050**, 1983.
- Strangeway, R. J., Wave dispersion and ray propagation in a weakly relativistic electron plasma, implication for the generation of auroral kilometric radiation, *J. Geophys. Res.*, **90**, 9675, 1985.
- Summers, D., and G. L. Siscoe, Solutions to the equations for corotating magnetospheric convection, *Astrophys. J.*, **261**, 677, 1982.
- Terasawa, T., K. Maezawa, and S. Machida, Solar wind effect on Jupiter's non-Io-related radio emission, *Nature*, **273**, 131, 1978.
- Thieman, J. R., A. G. Smith, and J. May, Motion of Jupiter's decametric sources in Io phase, *Astrophys. Lett.*, **16**, 83, 1975.



- Thieman, J. R., A catalog of Jovian decameter radio observations from 1957–1978, *NASA/GSFC Techn. Rep.*, 80308, 1979.
- Thieman, J. R., and A. G. Smith, Detailed geometrical modeling of Jupiter’s Io-related decametric radiation, *J. Geophys. Res.*, **84**, 2666, 1979.
- Thompson, A. R., J. M. Moran, and G. W. Swenson, *Interferometry and Aperture Synthesis*, John Wiley and Sons, 1986.
- Trafton, L., The Jovian SII torus: Its longitudinal asymmetry, *Icarus*, **42**, 111, 1980.
- Trauger, J. T., G. Münch, and F. L. Roesler, A study of the Jovian [SII] nebula at high spectral resolution, *Astrophys. J.*, **236**, 1035, 1980.
- Tricomi, F. G., *Integral equations*, Interscience Publ., New York, 1957.
- Tyler, G. L., D. N. Sweetnam, J. D. Anderson, J. K. Campbell, V. R. Eshleman, D. P. Hinson, G. S. Levy, G. F. Lindal, E. A. Marouf, and R. A. Simpson, Voyager 2 radio science observations of the Uranian system: atmosphere, rings, and satellites, *Science*, **233**, 79, 1986.
- van Kampen, N. G., On the theory of stationary waves in plasmas, *Physica*, **21**, 949, 1955.
- van Kampen, N. G., The dispersion equation for plasma waves, *Physica*, **23**, 641, 1957.
- van Vleck, J. H., and D. Middleton, *Proc. IEEE*, **54**, 2, 1966.
- Vasyliunas, V. M., A mechanism for plasma convection in the inner Jovian magnetosphere, paper presented at the COSPAR program, Comm. on Space Res., Innsbruck, Austria, May 29–June 10, p. 66, 1978.
- Vasyliunas, V. M., Plasma distribution and flow, in *Physics of the Jovian Magnetosphere*, edited by A.J. Dessler, p. 395, Cambridge Univ. Press, 1983.
- Verdeyen, J. T., *Laser Electronics*, Prentice–Hall, Englewood Cliffs, New Jersey, 1981.
- Voots, G. D., D. A. Gurnett, and S. I. Akasofu, Auroral kilometric radiation as an indicator of auroral magnetic disturbances, *J. Geophys. Res.*, **82**, 2259, 1977.
- Wang, W. X., *An observationally compatible model for Jupiter’s Io-related decametric emission*, Ph. D. thesis, Univ. of Florida, 1985.
- Warwick, J. W., Radio star scintillations from ionospheric waves, *Radio Sci. J. of Res. N. B. S.*, **68D**, 179, 1964.
- Warwick, J. W., and G. A. Dulk, Faraday rotation on decametric radio emission from Jupiter, *Science*, **145**, 380, 1964.
- Warwick, J. W., G. A. Dulk, and A. C. Riddle, *Jupiter radio emission: January 1960 to March 1975*, Rep. PRA 3, Radio Astronomy Observatory of the Univ. of Colorado, Boulder, 1975.
- Warwick, J. W., J. B. Pearce, R. G. Peltzer, and A. C. Riddle, Planetary Radio Astronomy experiment for Voyager missions, *Space Sci. Rev.*, **21**, 309, 1977.
- Warwick, J. W., J. B. Pearce, A. C. Riddle, J. K. Alexander, M. D. Desch, M. L. Kaiser, J. R. Thieman, T. D. Carr, S. Gulkis, A. Boischot, C. C. Harvey, and B. M. Pedersen, Voyager 1 Planetary Radio Astronomy observations near Jupiter, *Science*, **204**, 995, 1979a.

- Warwick, J. W., J. P. Pearce, A. C. Riddle, J. K. Alexander, M. D. Desch, M. L. Kaiser, J. R. Thieman, T. D. Carr, S. Gulkis, A. Boischot, Y. Leblanc, B. M. Pedersen, and D. H. Staelin, Planetary Radio Astronomy observations from Voyager 2 near Jupiter, *Science*, **206**, 991, 1979b.
- Warwick, J. W., J. B. Pearce, D. R. Evans, T. D. Carr, J. J. Schauble, J. K. Alexander, M. L. Kaiser, M. D. Desch, B. M. Pedersen, A. Lecacheux, G. Daigne, A. Boischot, and C. H. Barrow, Planetary Radio Astronomy observations from Voyager 1 near Saturn, *Science*, **212**, 239, 1981.
- Warwick, J. W., D. R. Evans, J. H. Romig, C. B. Sawyer, M. D. Desch, M. L. Kaiser, J. K. Alexander, T. D. Carr, D. H. Staelin, S. Gulkis, R. L. Poynter, M. Aubier, A. Boischot, Y. Leblanc, A. Lecacheux, B. M. Pedersen, and P. Zarka, Voyager 2 radio observations of Uranus, *Science*, **233**, 102, 1986.
- Webster, D. L., A. Y. Alksne, and R. C. Whitten, Does Io's ionosphere influence Jupiter's radio bursts ?, *Astrophys. J.*, **174**, 685, 1972.
- Weitzner, H., Green's function for the linearized Vlasov equation, *Phys. Fluids*, **5**, 933, 1962.
- Willson, R. F., VLA observations of narrow-band decimetric burst emission, *Solar Phys.*, **96**, 199, 1985.
- Winglee, R. M., Interrelation between azimuthal bunching and semi-relativistic maser cyclotron instabilities, *Plasma Phys.*, **25**, 217, 1983.
- Winglee, R. M., Fundamental and harmonic electron cyclotron maser emission, *J. Geophys. Res.*, **90**, 9663, 1985.
- Winglee, R. M., On Io's control of Jovian decametric radio emissions, *J. Geophys. Res.*, **91**, 1405, 1986.
- Wohlleben, R., and H. Mattes, *Interferometrie in Radioastronomie und Radartechnik*, Vogel-V., Würzburg, 1973.
- Wolf-Gladrow, D. A., F. M. Neubauer, and M. Lüssem, Io's interaction with the plasma torus: A self-consistent model, *J. Geophys. Res.*, **92**, 9949, 1987.
- Wong, H. K., C. S. Wu, F. J. Ke, R. S. Schneider, and L. F. Ziebell, Electromagnetic cyclotron-loss-cone instability associated with weakly relativistic electrons, *J. Plasma Phys.*, **28**, 503, 1982.
- Wright, A. N., The interaction of Io's Alfvén waves with the Jovian magnetosphere, *J. Geophys. Res.*, **90**, 1755, 1987.
- Wu, C. S., and L. C. Lee, A theory of the terrestrial kilometric radiation, *Astrophys. J.*, **230**, 621, 1979.
- Wu, C. S., S. T. Tsai, M. J. Xu, and J. W. Shen, Saturation and energy-conversion efficiency of auroral kilometric radiation, *Astrophys. J.*, **248**, 384, 1981a.
- Wu, C. S., C. S. Lin, H. K. Wong, S. T. Tsai, and R. L. Zhou, Absorption and emission of extraordinary-mode electromagnetic waves near cyclotron frequency in nonequilibrium plasmas, *Phys. Fluids*, **24**, 2191, 1981b.
- Wu, C. S., H. K. Wong, D. J. Gorney, and L. C. Lee, Generation of auroral kilometric radiation, *J. Geophys. Res.*, **87**, 4476, 1982.

- Wu, C. S., and X. M. Qiu, Emission of second-harmonic auroral kilometric radiation, *J. Geophys. Res.*, **88**, 10072, 1983.
- Wu, C. S., Kinetic cyclotron and synchrotron maser instabilities: Radio emission processes by direct amplification of radiation, *Space Sci. Rev.*, **41**, 215, 1985.
- Yamaashi, K., K. Hashimoto, and I. Kimura, 3-D electrostatic and electromagnetic ray tracing in the magnetosphere, *Mem. Natl. Inst. Polar Res., Spec. Issue*, **47**, 192, 1987.
- Zaitsev, V. V., E. Y. Zlotnik, and V. E. Shaposhnikov, The origin of S-bursts in Jupiter's decametric radio spectra, *Astron. Astrophys.*, **169**, 345, 1986.
- Zarka, P., and F. Genova, Low-frequency Jovian emission and solar wind magnetic sector structure, *Nature*, **306**, 767, 1983.
- Zarka, P., and B. M. Pedersen, Radio detection of Uranian lightning by Voyager 2, *Nature*, **323**, 605, 1986a.
- Zarka, P., and B. M. Pedersen, Stereoscopic determination of Saturn kilometric radiation beaming, paper presented at 2nd Neil Brice Memorial Symposium, *Magnetosphere of the Outer Planets*, Univ. of Iowa City, Sept. 1-5, (to be published in *J. Geophys. Res.*), 1986b.
- Zarka, P., D. Le Quéau, and F. Genova, The maser synchrotron instability in an inhomogeneous medium: Determination of the spectral intensity of auroral kilometric radiation, *J. Geophys. Res.*, **91**, 13542, 1986.
- Zarka, P., and A. Lecacheux, Beaming of Uranian nightside kilometric radio emission and inferred source location, *J. Geophys. Res.*, **92**, 15177, 1987.
- Zheleznyakov, V. V., in *Radio Emission of the Sun and Planets*, edited by J. S. Hey (transl. by H. S. H. Massey), p. 154, Pergamon Press, New York, NY, 1970.